Figure 1

## PhenoSense-HBV: Indicator Gene Viral Vector

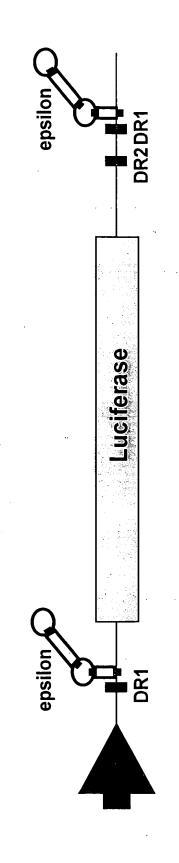
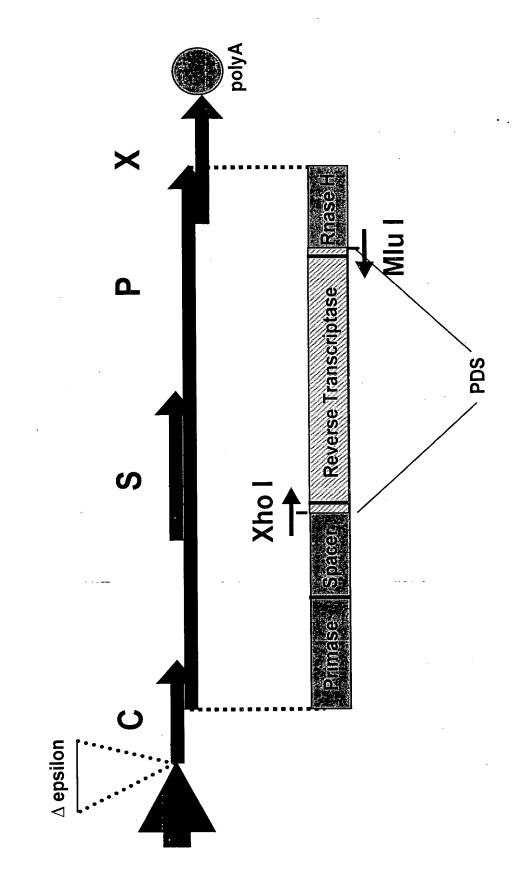
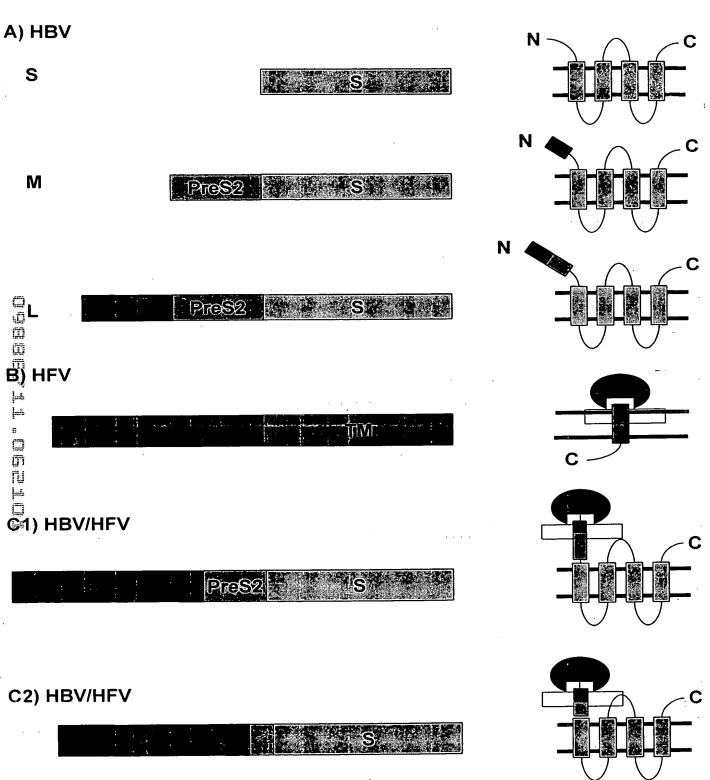


Figure 2

## PhenoSense-HBV: Resistance Test Vector





Organization of HBV and HFV envelope proteins

- A. HBV env, S, PreS2, PreS1 domains represent the small (S), middle (M), and large (L) surface proteins, respectively
- B. HFV SU = surface, TM = transmembrane
- C1. Chimeric HBV/HFV env fusion protein with PreS1N-term deletion
- C2. Chimeric HBV/HFV env fusion protein with PreS1 N-term deletion and PresS2 C-term deletion